

IN THE CLAIMS:

Please cancel Claims 33 to 44 without prejudice or disclaimer of subject matter. Please amend the remaining claims, as follows:

1. (Currently Amended) An information processing apparatus as a host computer for generating print data including printer control commands to be transmitted to a printing apparatus, comprising:

a spooler which is adapted to convert drawing data issued for printing by an application ~~to be printed into intermediate code format data~~ different from the print data and from the drawing data, and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including layout information specified via a user interface of a printer driver for the printing apparatus, wherein said spooler is configured to convert drawing data from multiple applications and is configured to spool a plurality of the intermediate code format data of a plurality of print jobs from multiple applications;

a processor which is adapted to compose the plurality of the intermediate code format data of the plurality of print jobs spooled by said spooler and to generate composed print data of one composed job; and

a previewer which is adapted to obtain layout information of the plurality of print jobs composed by said processor and to perform ~~to a~~ simultaneous display of a preview image of the plurality of the intermediate code format data from the multiple

applications before said processor generates the composed print data of the composed job, the preview image being edited in accordance with the respective layout information,

wherein the preview image indicates that the respective page ~~layout~~ layouts of the plurality of print jobs ~~is~~ are maintained.

2. (Previously Presented) An apparatus according to claim 1, further comprising a setting editor for displaying a user interface to edit a print setting of the spooled intermediate code format data and to temporarily spool the print setting edited by said user interface in association with the intermediate code format data,

wherein the layout information is included in said print setting.

3. (Original) An apparatus according to claim 2, wherein said user interface can edit the print setting for the composed job.

4. (Cancelled)

5. (Previously Presented) An apparatus according to claim 1, wherein said respective ones of said layout information include a layout process in said information processing apparatus and a layout process in said printing apparatus.

6. (Currently Amended) An apparatus according to claim 1, further comprising a print data forming unit for forming the print data to be transmitted to said

printing apparatus on the basis of intermediate data-code format data spooled by said spooler.

7. (Currently Amended) An apparatus according to claim 6, further comprising:

a draw command forming unit for converting the intermediate data-code format data spooled by said spooler into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

a print command allocating unit for sending a print command received from the application through the drawing unit of the OS to the spooler and sending the print command received from said draw command forming unit through the drawing unit of the OS to said print data forming unit.

8. (Original) An apparatus according to claim 7, wherein the draw command is a GDI function, the print command is a DDI function, and the print data is a printer language.

9. (Currently Amended) An information processing method of an information processing apparatus as a host computer for generating print data including printer control commands to be transmitted to a printing apparatus, comprising:

a spooling step to convert drawing data formed-issued for printing by an application ~~to be printed into data in an~~ intermediate code format data different from the

print data and from the drawing data, and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including respective layout information specified via a user interface of a printer driver for the printing apparatus, wherein said spooling step is repeatable so as to convert drawing data from multiple applications and so as to spool a plurality of the intermediate code format data of a plurality of print jobs from multiple applications;

a processing step of ~~forming one composed job by~~ composing the plurality of the intermediate code format data of the plurality of print jobs spooled in said spooling step and generating composed print data of one composed job; and

a preview step of obtaining respective layout information of the plurality of print jobs composed in said processing step and ~~to output drawing data performing a~~ simultaneous display of a preview image of the plurality of the intermediate code format data from the multiple applications before said processing step generates the composed print data of the composed job, the preview image being edited in accordance with the respective layout information so as to control a display screen to ~~display of a preview of the composed job,~~

wherein said ~~preview step controls the display screen to display the preview image indicates~~ indicating that the respective page ~~layout layouts~~ of the plurality of print jobs ~~is are~~ maintained.

10. (Previously Presented) A method according to claim 9, further comprising a setting editing step of displaying a user interface to edit a print setting of the

spooled intermediate code format data and to temporarily spool the print setting edited by the user interface in association with the intermediate code format data,

wherein the layout information is included in said print setting.

11. (Original) A method according to claim 10, wherein the user interface can edit the print setting for the composed job.

12. (Cancelled)

13. (Previously Presented) A method according to claim 9, wherein the respective ones of said layout information include a layout process in said information processing method and a layout process in said printing apparatus.

14. (Previously Presented) A method according to claim 9, further comprising a print data forming step of forming the print data to be transmitted to said printing apparatus on the basis of the intermediate code format data spooled in the spooling step.

15. (Previously Presented) A method according to claim 14, further comprising:

a draw command forming step of converting the spooled intermediate code format data into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

a print command allocating step of sending a print command received from the application through the drawing unit of the OS in said spooling step and sending the print command received from said draw command forming step through the drawing unit of the OS to said print data forming step.

16. (Original) A method according to claim 15, wherein the draw command is a GDI function, the print command is a DDI function, and the print data is a printer language.

17. (Currently Amended) A computer-readable storage medium which stores a computer-executable program for an information processing apparatus used as a host computer for generating print data including printer control commands to be transmitted to a printing apparatus, wherein the program comprises:

a spooling step to convert drawing data formed-issued for printing by an application ~~to be printed into data in an intermediate code format~~ data different from the print data and from the drawing data, and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including layout information specified via a user interface of a printer driver for the printing apparatus, wherein the spooling step is repeatable so as to convert drawing

data from multiple applications and so as to spool a plurality of the intermediate code format data for a plurality of print jobs from multiple applications;

a processing step to ~~form one composed job by composing~~ compose the plurality of the intermediate code format data of the plurality of print jobs spooled in said spooling step and to generate composed print data of one composed job; and

a preview step to obtain respective layout information of the plurality of print jobs composed in said processing step and to ~~output drawing data perform a~~ simultaneous display of a preview image of the plurality of the intermediate code format data from the multiple applications before said processing step generates the composed print data of the composed job, the preview image being edited in accordance with the respective layout information so as to control a display screen to display of a preview of the composed job,

wherein ~~said preview step controls the display screen to display the preview image indicates~~ indicating that the respective page layout layouts of the plurality of print jobs is are maintained.

18. (Previously Presented) A computer-readable medium according to claim 17, wherein the program further comprises a setting editing step to display a user interface to edit a print setting of the spooled intermediate code format data and to temporarily spool the print setting edited by the user interface in association with the intermediate code format data,

and wherein the layout information is included in the print setting.

19. (Previously Presented) A computer-readable medium according to claim 18, wherein the user interface can edit the print setting for the composed job.

20. (Cancelled)

21. (Previously Presented) A computer-readable medium according to claim 17, wherein the respective ones of said layout information include a layout process in said information processing apparatus and a layout process in said printing apparatus.

22. (Previously Presented) A computer-readable medium according to claim 17, wherein the program further comprises a print data forming step to form the print data to be transmitted to said printing apparatus on the basis of the spooled intermediate code format data.

23. (Previously Presented) A computer-readable medium according to claim 22, wherein the program further comprises:

a draw command forming step to convert the spooled intermediate code format data into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

a print command allocating a step to send print command received from the application through the drawing unit of the OS in said spooling step and to send the print



command received from said draw command forming program code through the drawing unit of the OS to said print data forming step.

24. (Previously Presented) A computer-readable medium according to claim 23, wherein the draw command is a GDI function, the print command is a DDI function, and the print data is a printer language.

25. (Currently Amended) A computer-executable program stored on a computer-readable memory medium for an information processing apparatus as a host computer for generating print data including printer control commands to be transmitted to a printing apparatus, comprising:

spooling code for a spooling step to convert drawing data formed-issued for printing by an application to be printed into data in an intermediate code format data different from the print data and from the drawing data and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including layout information specified via a user interface of a printer driver for the printing apparatus, wherein the spooling code is executable repeatedly so as to convert drawing data from multiple applications and so as to spool a plurality of print jobs from multiple applications;

processing code for a processing step one composed job by composing the plurality of the intermediate code format data of the plurality of spooled print jobs and for generating composed print data of one composed job; and

preview code for a preview step to obtain respective layout information of the plurality of composed print jobs and to ~~output drawing data~~ perform a simultaneous display of a preview image of the plurality of the intermediate code format data from the multiple applications before said processor generates the composed print data of the composed job, the preview image being edited in accordance with the respective layout information so as to control a display screen to display of a preview of the composed job,

wherein said ~~preview code controls the display screen to display the preview image indicates~~ indicating that the respective page layout layouts of the plurality of print jobs is ~~are~~ maintained.

26. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 25, further comprising editing code for a setting editing step to display a user interface to edit a print setting of the spooled intermediate code format data and to temporarily spool the print setting edited by the user interface in association with the intermediate code format data,

wherein the layout information is included in the print setting.

27. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 26, wherein the user interface can edit the print setting for the composed job.

28. (Cancelled)

29. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 25, wherein the respective ones of said layout information include a layout process in said information processing apparatus and a layout process in said printing apparatus.

30. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 25, further comprising print-data forming code for a print data forming step to form the print data to be transmitted to said printing apparatus on the basis of the spooled intermediate code format data.

31. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 30, further comprising:

draw-command code for a draw command forming step to convert the spooled intermediate code format data into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

print-command allocating code for a print command allocating step to send a print command received from the application through the drawing unit of the OS to said spooling program code and to send the print command received from said draw-command forming code through the drawing unit of the OS to said print-data forming code.

32. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 31, wherein the draw command is

a GDI function, the print command is a DDI function, and the print data is a printer language.

33. to 44. (Cancelled)